Review Unit 6-Chapter 13.1,14, and 10.2 Chem 11- Mrs. Sanford Name:

Gas- period:

Give 3 characteristics of a gas- 1 2.

(using kinetic theory) 3.

Boyle's Law-

101.3 Kpa = _____mm Hg = _____atm.

S.T.P. -(Give units)-

Charle's Law-

Gay Lussac's Law-

_____is proportional to the average kinetic energy of the particles of a substance.

Kelvin Temp. Scale-

Combined Gas Law-

Avogadros's Hypothesis-

Molar volume-

Molar volume at STP-

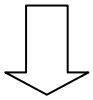
compare Ideal gases and real gases

Ideal Gases	Real Gases

What is R?

Problems

1. Convert 5.1L of CO gas at STP to moles.(ans) 2. Convert 20.7mL of fluorine gas at STP to moles.(9.24 x 10^{-4} mol)	3. Freon is a CFC used as a coolant in air conditioners and refrigerators. If 500mL of freon at 1.5atm and 24^{o} C is compressed to 250mL at 3.50 atm, what is the final temperature of the gas?(74^{o} C)
4. What is the volume of 1.0 g of carbon dioxide trapped in bread dough at STP? (Ans)	5. Find the molar mass of 6grams of a gas that occupies 27L at 150KPa and 30 ^{o} C.
6. In a cylinder of a diesel engine, 500 mL of air at 40.0 ^{o}C and 101.3 KPa is compressed just before the diesel fuel is injected. The resulting pressure is 3.54 x 10^{3}KPa . If the final volume is 23.0 mL, What is the final temperature in the cylinder?	7. Find an example from p 439 for a) Boyle's Law b)Charle's Law c) Gay-Lussac's Law d)Dalton's Law of Partial Pressure
Dalton's Law of partial pressures-	



Fill in the missing information:
In table:

_____C_8H_{18}(g) +	25 O_2(g)---->	_____ CO_2(g) + _____H_2O(g)	
1 mol	12.5mol	_____	_____
2 mol	_____	16 mol	_____
1 L	12.5 L	_____	_____
8 L	_____	64 mL	_____
____L	5 L	_____L	_____ L
250 mL	_____mL	_____mL	_____mL
_____L	_____10 L	_____L	_____L